

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-127

WATER RECLAMATION REQUIREMENTS FOR:
MARIN MUNICIPAL WATER DISTRICT
LAS GALLINAS VALLEY SANITARY DISTRICT

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Marin Municipal Water District (MMWD) and the Las Gallinas Valley Sanitary District (District) submitted a Report of Waste Discharge dated June 21, 1989. MMWD and the District are hereinafter called the dischargers.
2. The dischargers propose to use up to 2.0 million gallons per day (mgd) of reclaimed water which has received tertiary treatment. The wastewater receives secondary treatment at the District's treatment plant. Wastewater is treated further by the MMWD prior to its introduction to the reclaimed water distribution system. MMWD's treatment consists of flocculation, sedimentation, filtration, and chlorination.
3. The treatment train will produce an "adequately disinfected, oxidized, coagulated, clarified, filtered wastewater", as defined by Chapter 3 (commencing with Section 60301), Division 4, Title 22 of the California Administrative Code. As such, the wastewater may be used for 1) any and all such uses, as defined in Title 22, that require this level of treatment and disinfection and 2) any and all such uses, as defined in Title 22, for which a wastewater of lesser quality may be used. A list of potential users, and maps of the proposed service area, are attached.
4. California Water Code Section 13512 declares that it is the intention of the Legislature that the State undertake all possible steps to encourage development of water reclamation facilities so that reclaimed water may be made available to help meet the growing water demands of the State.
5. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The water quality goals to be used in regulating water quality factors as set forth in the Basin Plan include maximum feasible reclamation or reuse of municipal, industrial, and agricultural wastewaters.

6. Section 13523 of the California Water Code provides that, after consultation with and a recommendation from the State Department of Health Services and, if it is determined to be necessary to protect the public health, safety, or welfare, the Regional Board shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. As the uses as defined in Title 22 could affect the public health, safety, or welfare, requirements for these uses are necessary in accordance with Section 13523 of the California Water Code.
7. The dischargers are currently subject to wastewater reclamation requirements contained in Order 76-14, adopted by the Board on February 17, 1976. Since adoption of Order 76-14, the Department of Health Services has revised water quality standards for the use of reclaimed wastewater. Effluent limits contained in this permit incorporate these new standards.
8. Adoption of water reclamation requirements is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
9. The dischargers and interested parties have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity to submit their comments.
10. The Board, at a public meeting, heard and considered all comments pertaining to this proposed use of reclaimed wastewater.

IT IS HEREBY ORDERED that the dischargers, in order to protect the public health, safety and welfare, shall comply with the following:

A. Effluent Limits

1. The reclaimed wastewater shall meet the following water quality limits at some point in the treatment process or distribution system:

<u>Water Quality Parameter</u>	<u>Limit</u>
5-day BOD, maximum	40.0 mg/l
Dissolved Oxygen, minimum	2.0 mg/l
Dissolved Sulfide, maximum	0.1 mg/l
Total Coliform, median	2.2. per 100 ml for last seven days for which the analysis is performed.
Total Coliform, maximum	23 per 100 ml over any 30

Turbidity, average	day period. 2 turbidity units for last seven days for which the analysis is performed.
Turbidity, maximum	5 turbidity units.

2. In the event that there is a discharge under Provision 8 of this permit, the following effluent limits shall apply:

<u>Water Quality Parameter</u>	<u>Limit</u>
5-day BOD, maximum	10.0 mg/l
Dissolved Oxygen, minimum	5.0 mg/l
Dissolved Sulfide, maximum	0.1 mg/l
Total Coliform, median	2.2. per 100 ml for last seven days for which the analysis is performed.
Total Coliform, maximum	23 per 100 ml over any 30 day period.
Turbidity, average	2 turbidity units for last seven days for which the analysis is performed.
Turbidity, maximum	5 turbidity units.
Chlorine Residual	0.0 mg/l
Arsenic	20 ug/l
Cadmium	10 ug/l
Chromium	11 ug/l
Copper	20 ug/l
Cyanide	25 ug/l
Lead	5.6 ug/l
Mercury	1 ug/l
Nickel	7.1 ug/l
Silver	2.3 ug/l
Zinc	58 ug/l
Phenols	500 ug/l
Poly-Aromatic Hydrocarbons (As identified using EPA Method 610)	15 ug/l

B. Prohibitions

1. No reclaimed wastewater used for irrigation shall be allowed to escape from the area of application via surface flow or airborne spray.
2. The use of reclaimed wastewater shall immediately cease

if such use is resulting, or would result in, non-compliance with effluent limits, provisions, and prohibitions contained in this Order. If the most recent data collected shows the dischargers to be in non-compliance with provisions, prohibitions, or effluent limits contained in this Order, it will be assumed that the immediate and subsequent use of reclaimed wastewater would result in continued non-compliance.

3. No reclaimed wastewater shall be applied to areas of use when the soil is saturated or during periods of rain.

C. Provisions

1. The treatment, distribution, or use of the reclaimed wastewater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The use of reclaimed wastewater shall not cause degradation of groundwater suitable for domestic use or cause any change in a water quality parameter which would make the groundwater less suitable for irrigation use.
3. The reclaimed wastewater shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater, as defined in Chapter 3 (commencing with Section 60301), Division 4, Title 22 of the California Administrative Code.
4. All equipment, including pumps, piping and valves, tanks, etc, shall be adequately and clearly identified as being used for the transport, holding, or other use of reclaimed wastewater. In addition, the users shall make all necessary provisions to inform the public that the water is reclaimed wastewater and not fit for human consumption.
5. The user shall revise as necessary the written operating procedures mandated under Order 76-14 and submit these revised procedures to the Executive Officer of the Regional Board and to the Department of Health Services by October 1, 1989.
6. Inspections of that portion of the treatment and distribution system owned and operated by the MMWD shall be performed by a sanitary engineer registered in the State of California one year prior to the date of permit renewal, or every five years, whichever comes first. The engineer shall utilize any guidelines or requirements for the design and monitoring of such systems adopted or used by the California Department of Health Services, the Regional Water Quality Control Board, and the California-Nevada chapter of the American Water Works Association.


Reports shall be submitted by the engineer directly to this Board's Executive Officer, and the dischargers shall indicate in writing, within thirty days of the submittal of the report, what corrective actions will be taken if any problems are noted.

7. This Order includes all items of the attached 1) Self Monitoring Program and 2) Guidelines for Use of Reclaimed Wastewater, Department of Health Services, State of California.
8. Marin Municipal Water District will submit to this office, by February 1 of each year, a report on the volume of water needed to supply reclamation projects for the upcoming year. Should MMWD not require this amount of water due to, though not limited to, such events as late rains or contract cancellations, the discharger may, upon written approval of the Executive Officer of the Regional Board, discharge treated wastewater to Miller Creek through the Las Gallinas Valley Sanitary District outfall, provided that 1) the amount of effluent discharged does not exceed the amount scheduled, but not used, for reclamation; 2) the wastewater is treated using the unit processes described in these water reclamation requirements; 3) there is no bypass of said processes; 4) MMWD submits, prior to discharge, a time schedule for discharge; this time schedule will be a) such that it seeks to create a uniform flow into the creek throughout the remainder of the summer months (ie, the "no-discharge" period) or b) based upon guidance from the California Department of Fish and Game and 5) the discharger demonstrates that it has made a good faith effort to distribute the effluent among alternate users.
9. The Dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed, or as modified, to achieve compliance with this Order.
10. The Dischargers shall permit the Board or its authorized representatives, in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Access to and copy of, at reasonable times, any records that must be kept under conditions of this Order;
 - c. Inspection, at reasonable times, of any facility, equipment (including monitoring and control equipment), practices, or operations regulated under

this Order;

- d. To photograph, sample or monitor, at reasonable times, regulated facilities or activities related to maintaining compliance with this Order.
11. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
- a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized reuse;
 - d. Endangerment to public health or environment that can only be regulated to acceptable levels by Order modification or termination.
12. This Order supercedes Order 76-14. Order 76-14 is hereby rescinded.
13. The Board will review this Order periodically and may revise the requirements when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 19, 1989.



Steven R. Ritchie
Executive Officer

Attachments:

DHS Guidelines for Use of Reclaimed Wastewater, 1986
Self-Monitoring Program, Parts A and B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

MARIN MUNICIPAL WATER DISTRICT
LAS GALLINAS VALLEY SANITARY DISTRICT
MARIN COUNTY

ORDER NO. 89-127

CONSISTS OF

PART A, DATED DECEMBER 1986

AND

PART B

July 19, 1989

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-127
SELF MONITORING PROGRAM, PART B, FOR:

MARIN MUNICIPAL WATER DISTRICT
MARIN COUNTY

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the in or after the disinfection facilities at which point adequate contact with the disinfectant is assured.

B. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
P-1 through P-"n"	Located along the periphery of the irrigation areas at equidistant intervals, not to exceed 300 feet.

II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis shall be that given as Table 1.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharger requirements established in Regional Board Order No. 89-127.
2. Was adopted by the Board on July 19, 1989.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or written request from the discharger, and revisions will be ordered by the Executive Officer or Regional Board.



Steven R. Ritchie
Executive Officer

Effective Date

7/19/89

Attachments: Table 1

TABLE 1
Schedule for Sampling, Measurement, and Analysis

Self Monitoring Program for:
Marin Municipal Water District
Las Gallinas Valley Sanitary District

<u>SAMPLING STATIONS</u>		<u>E-001</u>	<u>All P Stations</u>	
	<u>Frequency</u>	<u>Sample Type</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow Rate	(Report Daily Flow)			
Total Coliform	D	G		
Chlorine Residual	CONT (Report Hourly in Monthly Report)			
BOD	W	G		
Arsenic	M (1)	COMP		
Cadmium	M (1)	COMP		
Chromim	M (1)	COMP		
Copper	M (1)	COMP		
Cyanide	M (1)	COMP		
Lead	M (1)	COMP		
Mercury	M (1)	COMP		
Nickel	M (1)	COMP		
Silver	M (1)	COMP		
Zinc	M (1)	COMP		
Phenols	M (1)	COMP		
Poly-Aromatic Hydrocarbons	M (1)	COMP		
All Applicable Standard Observations			2W	

KEY TO TABLE 1

D	Daily
W	Weekly
2W	Twice Weekly
M	Monthly
G	Grab
O	Observation
CONT	Continuous
COMP	Composite

- (1) Analysis to be performed in each month for which reclaimed wastewater is discharged to Miller Creek